

Listing of Claims

1. (Currently Amended) A transgenic plant comprising a plant transformation vector comprising a heterologous constitutive promoter operatively linked to a nucleotide sequence that encodes a DRO2 polypeptide comprising an amino acid sequence having at least 95% sequence identity to the amino acid sequence of SEQ ID NO:2 and including a Dof-type zinc finger domain, wherein the heterologous constitutive promoter provides overexpression of a DRO2 transcript such that said transgenic plant has increased drought tolerance to control plants as compared to a non-transgenic control plant.

2. (Canceled)

3. (Currently Amended) A method of producing increased drought tolerance in a plant, said method comprising:

a) introducing into plant cells a plant transformation vector comprising a heterologous constitutive promoter operatively linked to a nucleotide sequence that encodes a DRO2 polypeptide comprising an amino acid sequence having at least 95% sequence identity to the amino acid sequence of SEQ ID NO:2 to produce transformed cells, and

b) growing the transformed cells to produce a transgenic plant, wherein said heterologous constitutive promoter provides overexpression of a DRO2 transcript ~~nucleotide sequence is expressed,~~ and

c) identifying said transgenic plant with increased drought tolerance by measuring relative water content of said transgenic plant ~~said transgenic plant exhibits increased drought tolerance as compared to a non-transgenic control plant.~~

4. (Canceled)

5. (Original) A plant obtained by a method of Claim 3.

6. (Currently amended) A recombinant plant part obtained from a the plant according to Claim 5.

7. (Previously Presented) A method of producing increased drought tolerance in a plant, said method comprising:

a) introducing into plant cells a plant transformation vector comprising a nucleotide sequence that encodes a DRO2 polypeptide comprising the amino acid sequence of SEQ ID NO:2 to produce transformed cells, and

b) growing the transformed cells to produce a transgenic plant, wherein said nucleotide sequence is expressed, and said transgenic plant exhibits increased drought tolerance as compared to a non-transgenic control plant.

8. (Previously Presented) The method of Claim 7 wherein a DRO2 polypeptide is over-expressed in the transgenic plant as compared to a non-transgenic control plant.

9. (Canceled)

10. (Currently amended) The ~~transgenic plant~~ method of Claim ~~9~~ 7 wherein the transformation vector comprises a constitutive promoter that controls expression of the DRO2 polypeptide.

11. – 15. (Canceled)

16. (New) A transgenic plant comprising a heterologous nucleic acid construct comprising a T-DNA, an enhancer element, and a nucleotide sequence that encodes a DRO2 polypeptide comprising an amino acid sequence having at least 95% sequence identity to the amino acid sequence of SEQ ID NO:2 and including a Dof-type zinc finger domain, wherein the T-DNA inserts into a genome of the transgenic plant and the enhancer element provides upregulation of genes within about 10 kilobases of the T-DNA insertion resulting in the overexpression of a DRO2 transcript in the transgenic plant and increased drought tolerance and increased relative water content as compared to a non-transgenic control plant.